Force Provider Global Sourcing Collaborative Workflow Staffing Capability

July 09, 2007

Comments or inquiries regarding this document may be addressed to:
Commander, US Joint Forces Command,
J3/4 Information Management Division
Attn: James Pasch, (Code: J3/4IM)

E-mail:

Unclas: james.pasch@jfcom.mil
Commercial: (757) 836-6437
DSN: 836-6437

1 Scope

Manage workflow and tasks in a collaborative environment in support of global sourcing of forces, capabilities, and individual augmentees.

2 Background and Objectives

2.1 Background

The Director for Operations, Joint Staff (J3), Director for Operations, Plans, Logistics, and Engineering, US Joint Forces Command (J4), and Joint Deployment and Logistics Group, US Joint Forces Command (J9), by direction of Deputy Undersecretary of Defense for Readiness, the Director of the Joint Staff, and the Deputy Commander, US Joint Forces Command, conducted a Force Management Integration Project (FMIP) Team Kick-off Meeting, 8-9 May, 2007. The purpose of that kick-off meeting was to develop and execute a plan for integrating and synchronizing policy, processes, authoritative databases, and technology for contingency and execution force sourcing. That plan would enable the improved management of global forces. During the meeting, participants identified required products, developed a plan of action and milestones, and established an aggressive phased approach for conducting three focused workshops to sequentially address capability gaps in three areas. This request for information is soliciting input from industry and academia for one of those shortfall capability gaps – development of a force provider global sourcing collaborative workflow staffing capability.

The workshop membership comprised of government representatives from OSD, the Joint Staff, the Service headquarters, and force providing combatant commands and their component organizations, will meet the week of 10-13 July to develop a capability description document for this needed capability. The end state is to identify a long-term technical solution to achieve a global sourcing collaborative staffing capability and this RFI offers industry and academia an opportunity to ensure the workshop membership understands what technologies may exist that can contribute to a force provider global sourcing collaborative workflow staffing capability. The final capability description document will be turned over to DISA by this October for follow-on development, and the Joint Combat Capability Developer (JCCD) to be included into the net-enabled command capability (NECC) family of systems. The final technical solution may be a single application or a collection of integrated tools, along with any necessary hardware support.

The following paragraphs describe the general expectations of this tool and the appendixes provide detailed capabilities as they have been developed to date by the workshop membership. Respondents to this request for information should understand that this is a work in progress, and that the final capability document will be enhanced by those inputs received by the workshop. Responding to this RFI does not constitute any form of contractual agreement with those respondents. Respondents providing awareness of promising technologies that contribute significantly to understanding across the

workshop membership may be requested to attend the 10-13 July workshop during a specified demonstration period during that workshop.

Workflow staffing is automation of a business process, completely or in part, during which documents, information, or tasks are passed from one participant to another for action, according to a set of procedural business rules.

The force-providing mission is assigned to multiple organizations. USSOCOM is responsible for special operations forces. USSTRATCOM is responsible for strategic forces. USTRANSCOM is responsible for strategic lift assets, both surface and air, and associated forces. USJFCOM is tasked as the primary conventional force provider, with the specific mission to provide conventional sourcing solutions in support of rotational force requirements, emergent force requirements, exercise force requirements, contingency (OPLAN/CONPLAN/FUNCPLAN) force requirements, and individual augmentees. USPACOM and USEUCOM who have forces permanently assigned to their theaters and support USJFCOM in the development of those sourcing solutions. Service Secretaries (Army, Navy, Air Force, and Marine Corps) have capability sourcing responsibilities, and in that capacity are likewise considered force providing organizations in the context of this document and in defining the necessary tool to support this mission.

An analysis of the mission area of force providing on a global scale underscores the need to track forces worldwide and provide sourcing solutions, taking into account those forces' and capabilities' current levels of readiness, current locations, and both current and planned activities. The charter for this effort focuses on emergent, rotational, exercise, and adaptive planning contingency sourcing force requirements, and individual augmentee requirements directed by Secretary of Defense (SECDEF) in response to regional combatant commander requirements or executed in accordance with current policy dictated by the Global Force Management Allocation Plan

Workflow is concerned with the automation of procedures where documents, information, or tasks are passed between commands according to a defined set of rules to achieve, or contribute to, an overall mission. To perform this task, force providing organizations must possess a workflow support system to staff and process the enormous volume of materials that determine the residual capability of assigned forces, their current location, level of readiness, and current and planned activity, and the impact of employing that residual force. A Global Force management (GFM) workflow management system will improve the ability of a force providing organization to source and provide ready forces and capabilities to support other combatant commanders' and internal Service-specified requirements.

The Joint Force Provider Global Sourcing Collaborative Workflow Staffing Capability is needed to perform force provider tasks. This tool shall provide force providing organizations and staffs the means to effectively, efficiently, and coherently manage force providing activities. This is accomplished through collaborative, structured workflow process activities to plan operations, provide executive leadership actionable visibility on staffing process, and to share information on global force management.

2.2 Objectives

Provide a list of capabilities necessary for collaborative workflow staffing and management of global sourcing tasks.

2.3 Terms of Reference

The source document for all terms related to the management of global forces is the GFM Guidance dated May, 2005. The list of terms is intended to be sufficiently comprehensive to address specific terms that may be confused and to provide clarity in their usage throughout this document.

3 Overview of Required System Capabilities

Services Oriented Architecture

Collaborative Staffing Capability (CSC) will integrate capabilities into a Service Oriented Architecture (SOA) that includes applications and databases in accordance with DoD Net-Centric Data Strategy. CSC will be supported by Global Information Grid (GIG) Enterprise Services (GES) and Network Centric Enterprise Services (NCES) enabling shared access to Service/Agency/Joint-provided services (data sources and applications).

For the purposes of the enterprise services strategy, "a service in a Service Oriented Architecture (SOA) is an exposed piece of functionality with three properties: (1) the interface contract to the service is platform independent; (2) the service can be dynamically located and invoked; (3) the service is self-contained; it maintains its own state."

Every program contributing to the evolution of the GIG is expected to develop and register their COI services. Every program must make their COI services available to the enterprise and ensure accessibility of these services through the core and ECS services. Each program must account for how the core services are utilized to access the unique COI services of their program. Through distinct interfaces (i.e. capability interfaces), COI services will be legacy services as well as newly developed services sharable throughout the environment in a service oriented architecture practice.

Net-Centric

As implementation of a net-centric environment increases the number of touch points enabled by data/ information-sharing capabilities vertically and horizontally linked through the NECC mission space, a logical expectation is an increase in bandwidth requirement(s). The pragmatic approach to solving bandwidth issues is to attack the problem from the supply and demand standpoints. This is done by constantly working to insert advancing capabilities to expand available bandwidth on the supply end and by mandating bandwidth efficient design and selectable options for bandwidth-constrained warfighting tactical edge users. This approach will produce a strategy aiming for dynamic equilibrium as supply and demand needs ebb and flow. The IT development

strategy will leverage DoD "best practices" guidance such as Net-Centric Enterprise Solutions for Interoperability (NESI), a US Navy Program Executive Office (PEO) for C4I and Space, United States Air Force (USAF) Electronic Systems Center, and Defense Information Systems Agency collaboration, and the Assistant Secretary Defense Networks and Information Integration (ASD NII) Net Centric Checklist to facilitate the design, development and usage of common information systems that support Net-Centric Warfare.

Synchronous and Asynchronous Collaboration. Online collaboration technologies can be either synchronous or asynchronous, and each of these can deliver benefits to individual users and organizations. Synchronous collaboration involves two or more people exchanging information at the same time, such as in a face-to-face meeting or on a conference call. Examples of synchronous online collaboration are real-time chat, Webcasts that are viewed immediately, instant messaging, and electronic whiteboarding. Asynchronous collaboration involves an exchange of information in which different people might receive the information at different times. Examples of asynchronous collaboration include email, document sharing (when individuals look at uploaded documents at different times), newsgroups, discussion boards, and Webcasts that can be stored for later viewing.

Process Workflow Engine. The automation of a business process in which documents, information, or tasks are passed from one participant(s) to another for action, according to a set of procedural rules. A workflow is made up of many functions and activities such as a review process, task lists, notifications, alerts/triggers, reminders, context sensitive tasks, an approval process, status/tracking, due dates and reporting.

Workflow is normally comprised of a series of logical steps called a hierarchy that define a business process. Each step contains a task to be completed and the participants that will perform the task. The task could be items such as a review assignment, an approval process, or a request to update a document. Some tasks within a workflow hierarchy, such as a simple email notification, can be automated and require no participants.

Automated workflow is important inside an organization because it ensures maximum throughput and accuracy when distributing work or tasks. It improves the control of a process with less manual intervention, eliminating misplaced work, reducing delays, and ensuring tasks are performed according to your company's policies and procedures.

Reporting Capabilities. Information access is the most important function of any mission critical system. The application must allow users to access standard documents or create their own documents based on data within the system by using embedded functionality. Standard reports must be provided that can be tailored to meet each organizations' information requirements.

System Administration Capabilities. Such an architecture comprised of internal integration of capabilities linked externally through web services such as that proposed in this document must include system administration of capabilities built upon a comprehensive runtime governance structure. Successful instances of such capability incorporate a policy-based approach that supports architectures absent of agents, but

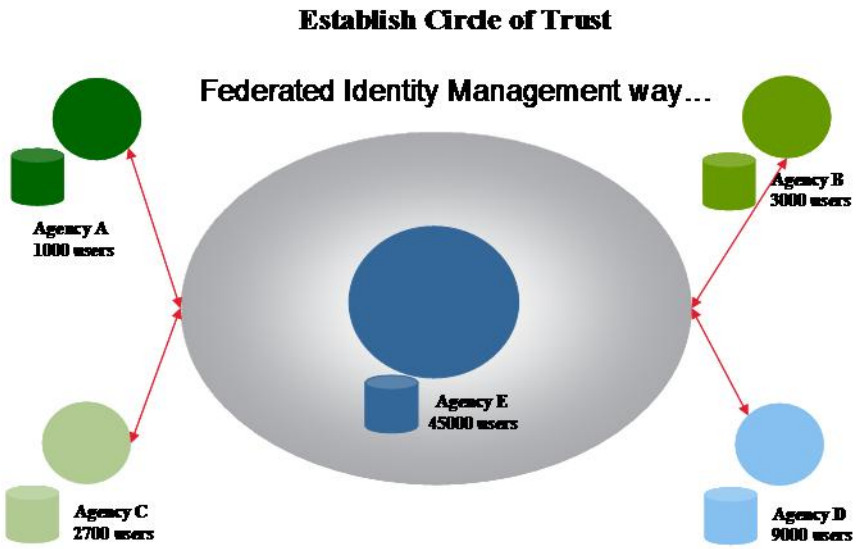
flexible to evolve into an agent-based architecture. Such system administration must be non-invasive to the underlying services and delivery of functionality. Integration with the enterprise is critical. In this instance the enterprise is largely that of DoD (Net-centric enterprise services, or NCES) but is also comprised of organizational network enclaves (i.e., the secure internet protocol network, or SIPRnet; non-secure internet protocol network, or NIPRnet; Joint training and experimentation network, or JTEN, defense research and engineering network, or DREN, and secure defense research and engineering network, or SDREN).

Where the DISA goal of providing core enterprise services to the DoD enterprise falls short of individual organizational needs, organizational network enclaves must establish capabilities to bridge those shortfalls. The system must be capable of providing capabilities (stand-alone or in concert with existing external capabilities) such as service discovery, management of service delivery and lifecycle, address heightened security concerns, provide insight into services as well as business transactions and processes, set and maintain appropriate service levels, manage errors and exceptions, enable online upgrades and versioning, validate updated services before re-deploying them into production, and auditing, logging and diagnosing systems in production.

System Architecture. Built upon a foundation comprised of a service oriented architecture, the force provider global sourcing collaborative staffing capability will integrate one or more commercial off-the shelf products to deliver desired end-state functionality. User-profile-driven graphical user interfaces, dynamic dashboard reporting capabilities able to be tailored to end-user responsibilities (i.e., action officers implementing the force sourcing process and senior leader decision makers in the commitment of capabilities such as the Secretary of Defense), and reuse of services to facilitate the force providing process are important capabilities to achieve system and mission success.

System Security. Security is a significant aspect of such a proposed ubiquitously accessible, multi-domain system as that proposed in this document. Critical to support of an operations supporting web services-enabled architecture is a federated identity management (FIM) solution. That FIM solution is a key enabler for the DoD net-centric operational vision. FIM is a methodology of managing user identities across multiple domains without having to replicate those identities – one identity applied across multiple domains and their applications and data.

FIM allows local management of users. Local sites are able to establish as well as terminate users, reflect promotions, and change roles dynamically. In a federated environment, those responsibilities are borne by the parent organization. Established upon standards-based security practices, the success of FIM is the establishment of trust domains that can cross not only organizations within DoD, but across agencies as well.

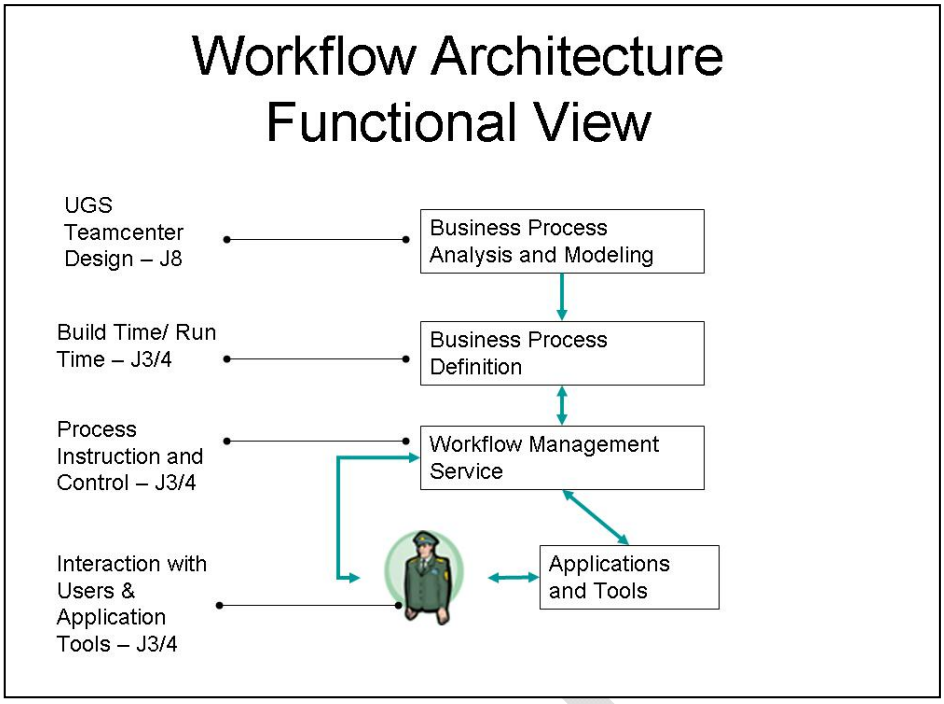


General. Force providing organizations require the capability to process information and data sharing competently and efficiently. This necessitates employment of a number of features that enable users to work collectively on force/capability sourcing requirements as well as support for various Requests for Information and Request for Forces artifacts.

This tool is envisioned to be the primary tool for staffing GFM rotational force requirements, emergent force requirements, exercise force requirements, contingency) force requirements and individual augmentees, from request to issuance of authoritative sourcing direction (order). This staffing process may or may not include staffing of a GFM Sourcing Action. The tool is also used for staff coordination for other GFM issues beyond orders production. Lastly, the tool will provide utility for service support to service orders staffing using the same process for workflow management and leadership visibility on total GFM workflow.

It provides a capability that permits concurrent commentary and iterative work on linked tasks. Users can efficiently track tasks and staff packages since this tool delivers information to team members simultaneously, thus facilitating individual and team decision making. The system must be a GIG compliant, web-based information-sharing application.

Existing capabilities should provide flexible, scaleable information exchange allowing for the horizontal and vertical sharing of information while providing a means for tracing the decision making process through the entire execution thread. These attributes make it useful not only in a command and control environment but also in any environment where people must share and track information, make decisions, and record their results.



The current capability is also "groupware" that provides a repository for chronological event tracking, information cataloging, and sharing of data (unprocessed) or information (processed and touched by human hands). An adaptable database stores the information entered and is viewed by users via a web browser interface. A native Windows client program allows authorized users to create and configure resources in the system such as an application-programming interface – allowing external systems to create and revise entries.

4 Functional Requirements

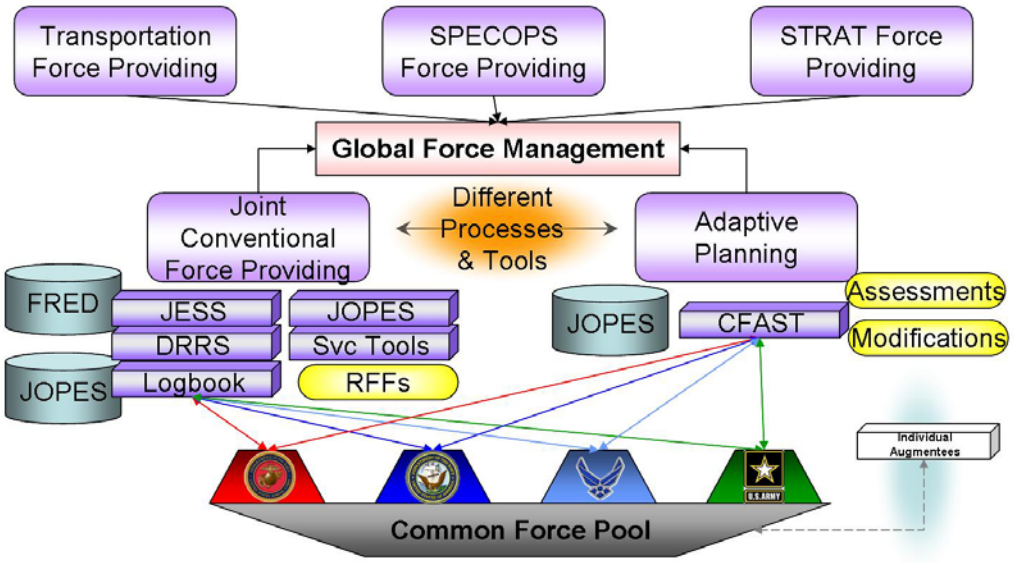
The capability for a Global Sourcing Collaborative Staffing Capability (GSCSC) must support several distinct business processes across all Joint Force Providing (JFP) organizations. It must also support several cross-cutting business capabilities. The business processes to be supported are:

- Emergent Needs force providing
- Rotational force providing
- Individual Augmentee force providing
- Contingency Planning force providing
- Exercise force providing

Each of these activities has distinct workflow requirements. In addition, there are common workflows that cross-cut these primary functional activities:

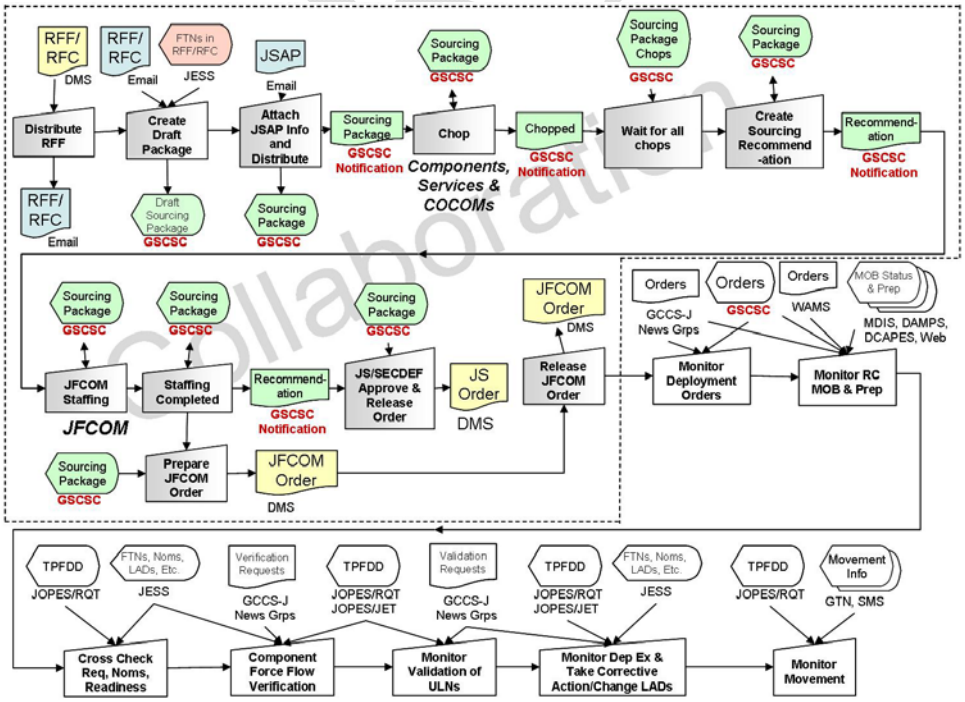
- Request for Information
- Report Generation

Each of these activities will be discussed in more detail below, and may have individual treatment based on the JFP – JFCOM, STRATCOM, SOCOM, or TRANSCOM.



4.1 Emergent Needs Force Providing

Emergent Needs force providing is based on a series of overlapping workflows. There is often a core document in the current process – a Joint Staff Action Package (JSAP) that carries across the series of workflows. Each JSAP staffing package or other request for forces such as feasibility-to-support will be considered as a separate workflow instance.



From this point forward in this document, a JSAP as it pertains to staffing of sourcing requirements under all five sourcing venues (emergent, rotational, exercise, contingency, and individual augmentee requirements) will be collectively referred to as global force management (GFM) sourcing action.

The front-end of the emergent needs force providing workflow begins when the Global Force Manager has incorporated all pertinent data from source documents (JSAP, RFF etc.) into the applicable GFM sourcing action (GFMSA). Once the Global Force Manager has completed the initial information entry into the GFMSA it is distributed via automated e-mail to selected force providers and involved commands. From this point on, and throughout the remaining workflow, the GFMSA is used as parent document for all follow-on actions (RFIs, FP chops, Sourcing recommendations and associated report documents).

Action recipients of the GFMSA notification will open the GFMSA and generate a command specific working chop for internal staffing. The generated chop as well as all other GFMSA related actions will remain linked to the parent GFMSA throughout the workflow to include final archiving. Once the working chop completes internal FP command staffing it can be released in final to the parent Global Force Manager. Access to FP chops is regulated by permissions throughout the chop process. Chop responses to a GFMSA contain several layers of information from the Force Providers to include unit specific data.

The processes within the emergent needs FP workflow are sequential for the most part with the exception of Request for Information (RFIs). Associated RFIs are generated for parent GFMSA throughout the workflow. As with the chops, RFIs are generated from, and in conjunction with, a parent GFMSA. They are created by involved commands and force providers to record inquiries and responses for a wide range of related sourcing issues related to the parent GFMSA.

The final process in the workflow begins with submission of all final chops relating to a GFMSA. Once all GFMSA chops have been submitted to the Global Force Manager a Sourcing Recommendation (SR) can be generated from within the GFMSA. The Global Force Manager will create an SR after reviewing all chop responses to the pertinent GFMSA. The Global Force Manager will also include unit specific data provided by selected force provider/s. This information will be part of the SR submitted to the Joint Staff. In addition to providing this unit specific data to the Joint Staff this information is also entered into related GFM data bases during the SR process. As with all RFIs and Chops the SR will remain linked to the GFMSA throughout the emergent needs FP workflow including archive.

The reporting process overlaps the entire emergent needs FP workflow. Reports can be custom template in design or created ad hoc by the user. All reports are stored and web accessible for ready user access. User level access permits report snapshot and automated archive functionality. With the exception of chop staffing the entire workflow is open to summary reporting products. Internal and external reporting capability is available to all

command levels within the emergent need FP workflow. This reporting capability extends several types of display media to include WEB BASED, MS PPT, MS EXCEL etc. These reports can be exported/published manually or by automated scheduler in and out of the workflow environment.

4.1.1 Common Attributes

All emergent requirements staffing packages have several sets of characteristics in common – these represent standard "administrative" requirements that do not vary during the course of the workflow.

(1) Each GFM Sourcing Action staffing package must have a package owner (a Joint Staff Action Officer, or JS AO). That JS AO is aligned to the supported combatant commander initiating the requirement.
(2) Each GFM Sourcing Action staffing package must have an associated "respond to" listing. This listing must support both personal and organizational points of contact.
(3) For any communication of a GFM Sourcing Action staffing package request, the user must select some subset of associated "respond to" list items. The communication (queued action request, direct e-mail, etc.) must include the selected "respond to" subset for all applicable responder fields in the communication.
(4) All GFM Sourcing Action staffing packages must have an associated reporting visibility. The GFM Sourcing Action staffing package owner (and designated action officers) must be able to set the reporting visibility for the GFM Sourcing Action staffing package. **NOTE:** implementer is encouraged to be creative in this requirement. As currently active reports increase, and as diverse users exercise the system, a balance must be struck between fine-grained reporting visibility control and ease of use.

THRESHOLD: current implementation supports a "Flag and General Officer's Daily Brief" report. Visibility to that report is a binary toggle. This is a JFCOM-specific requirement based on current implementation.

OBJECTIVE: GFM Sourcing Action staffing package owner can intuitively control visibility of the GFM Sourcing Action staffing package to all defined, prospective, and ad hoc reports that might "pick up" the GFM Sourcing Action staffing package.

(5) GFM Sourcing Action staffing packages must support associated Requests for Information (RFI). Each GFM Sourcing Action staffing package may have an unlimited number of RFIs associated.

(6) RFIs associated with a GFM Sourcing Action staffing package may be initiated at any point in the GFM Sourcing Action staffing process, and have an independent workflow.

4.1.2 Initiation

A new emergent requirements staffing package workflow is triggered by any of several events.

(7) The GSCSC must initiate a new staffing action based on any of:

1. Manual initiation (possibly based on phone call or outside e-mail)
2. Formal Request for Forces (RFF) message traffic
3. Formal GFM Sourcing Action staffing package message traffic

Each of these methods of initiation has different information contents.

(8) In manual initiation, there is no firm data available, so all fields must be optional (except as defined above in 4.1.1 Common Attributes)

4.2 Rotational Capability Requirements Force Providing

[insert graphic depiction of sourcing actions flow]

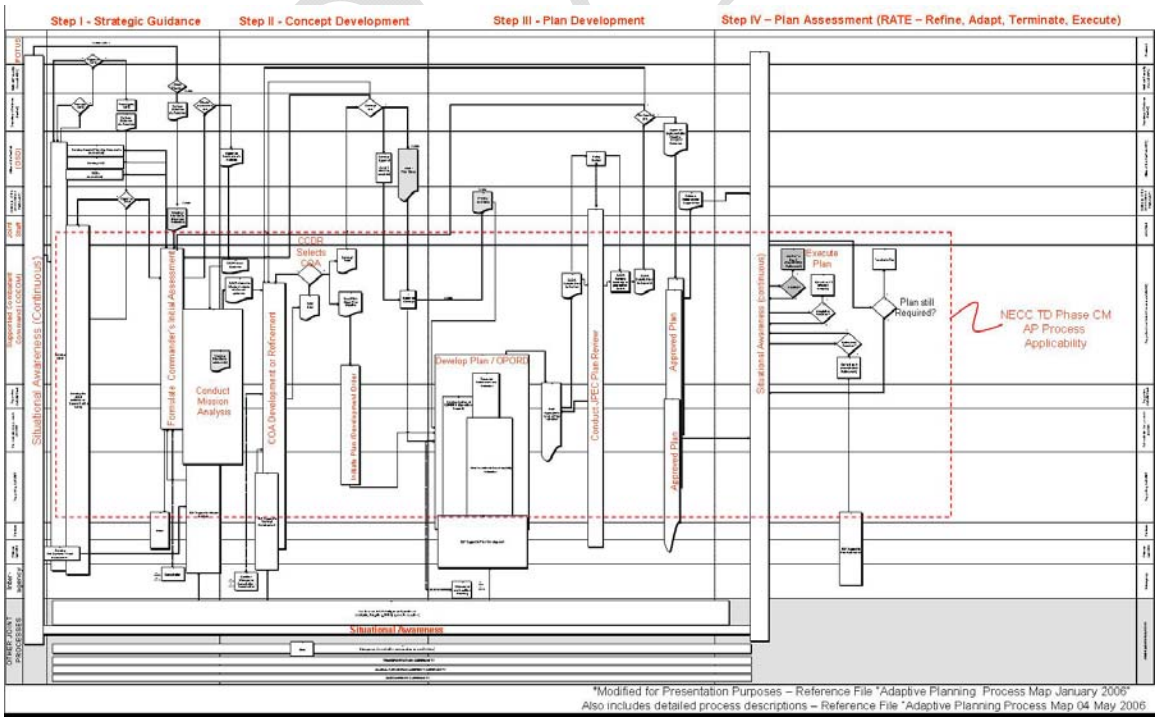
[Under development]

4.3 Exercise Capability Requirements Force Providing

[insert graphic depiction of sourcing actions flow]

[Under development]

4.4 Contingency Capability Requirements Force Providing



[Under development]

4.5 Individual Augmentee Requirements Force Providing

[insert graphic depiction of sourcing actions flow]

[Under development]

Appendix A

Force Provider Global Sourcing Collaborative Staffing Capability Detailed Requirements

No.	Requirements	Clarifying Criteria Comment
Key Performance Parameters		
1.00	**KPP1: Net Centric/Net-ready – The system shall support Net-Centric military operations**	**Net Ready:** The system must support Net-Centric military operations. The system must be able to enter and be managed in the network, and exchange data in a secure manner to enhance mission effectiveness. The system must continuously provide survivable, interoperable, secure, and operationally effective information exchanges to enable a Net-Centric military capability.
1.10		Threshold: The system must fully support execution of joint critical operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for transition to Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs, 3) NCOW RM Enterprise Services 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an Interim Approval to Operate (IATO) by the Designated Approval Authority (DAA), and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing* specified in the applicable joint and system integrated architecture views. * Data processing is defined as: The input, output, verification, organization, storage, retrieval, transformation and extraction of information from data. Objective: The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs, 3) NCOW RM Enterprise Services 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an Approval to Operate (ATO) by the Designated Approval Authority (DAA), and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and

No.	Requirements	Clarifying Criteria Comment
		consistent data processing* specified in the applicable joint and system integrated architecture views
2.00	**KPP2: Security – Provide or interface with a security service that meets NSA security requirements for government data on the SIPRNet (the existing security framework) for authorizing access to data sources, data elements, and rows of information returned as a result set from the tool**	**Rational:** Ensure timeliness and accuracy requirements support command and control planning and execution. Ensure information is accessible, discoverable and trusted by the Joint Force.
2.10	The product shall support account management and an access control mechanism (authentication, authorization, entitlement, and auditing) that provides secure access to data. Capability should include dynamic discovery, authentication of users via LDAP and PKI.	
2.10a		The product shall provide a mechanism to manage a user's access to tasks and workflow areas through definition of user roles, groups, and individual accounts.
2.10b		Product can easily interface with LDAP system components.
2.10c		Product can easily interface with PKI system components.
2.20	The product shall provide flexible access methods to source data.	The product shall control user access by providing access to data sources in the following manner:
2.20a		1. Enable *multiple* users, who have been given permission to access a source system, to share one (1) source system account.
2.20b		2. Individual user accounts. The product shall provide the capability for each GCSS user to logon to a source system with his/her own user id and password.
2.30		Accessible – Control user access (user-profile role arbitration and control), including but not limited to the ability to inherit and enforce roles and permissions from JOPES/JPERMS. Provide a single user interface for all capabilities offered by the product. Users will only need to register once and their profile will be maintained by the product for a given session. Once the User is authenticated at the interface no additional passwords, security

No.	Requirements	Clarifying Criteria Comment
		requests, or identification requirements will be needed at that interface. Session time outs, security time outs, lack of activity, etc. may require the User to re-enter the required authentication materials. An embedded security service will provide: **Identification and authentication** **Access Control** **Auditing** **Security Awareness** **Policy management** **Provisioning** **Encryption/data protection** Threshold: Provide a single authorized user interface leveraging userid/password **or** PKI certificates for authorization and authentication. Objective: Provide a single authorized user interface leveraging userid/password **and** PKI certificates for authorization and authentication.
2.40		Support security-based standards such as PKCS #11, FIPS-140, and 168-bit step-up certificates Threshold: 100% Objective: 100%
3.00	**KPP3: Discovery and Subscribe**	
3.10		Provide capability to for search and discovery of entities, data, applications, metadata, and services across the DoD enterprise for any authorized user and Community of Interest. Register the availability of content, people, and/or services, where the information stored includes at minimum, what it is, where to find it, and how to access it. Subscribe to automatic updates of changes to requested products. Threshold (Query Response Time): **Content** – **5** seconds for up to **100** requests per second for **20M** SIPRNET documents **Service** – **5** seconds for up to **10** queries per second for **1,000** registered enterprise services **People and Device** – Average **3** seconds based upon an expected **30** kilobyte retrieval **Metadata** – **5** seconds for up to **10** queries per second for **9,000** artifacts Objective (Query Response Time): **Content** – **3** seconds for up to **200** requests per second for **40** M SIPRNET documents **Service** – **3** seconds for up to **20** queries per second for **2,000** registered enterprise services **People and Device** – Objective = Threshold **Metadata – 3** seconds for up to **20** queries per second for **15,000** artifacts
4.00	**KPP4: Availability**	

No.	Requirements	Clarifying Criteria Comment
4.10		Data presentation support with: Threshold: Less than 3 hours downtime per week Objective: Less than 1 hour downtime per week
5.00	**KPP5: Read/Write**	
5.10		Support the ability to do both reading and writing of data from and to the original data sources, to include the ability to automatically update relational sources within transactional boundaries (XA) within a single database or across multiple databases. Provide exit points in which to call out to other services to provide non-automatic update support. The solution should be built on top of a standards-based update model such as the J2EE specification Service Data Objects. Threshold: (a) Display information at the level of accuracy received within 15 seconds (b) Subjective determination of *degree* to which data representation meets the requirements of 80% of the users, by user (1-5 scale: 1 fully, 5 unmet) Objective: (a) Display information in ($\leq$ 0.5 seconds) (b) Subjective determination of *degree* to which data representation meets the requirements of 100% of the users, by user (1-5 scale: 1 fully, 5 unmet)
6.00	**KPP6: Scalability**	
6.10		Have the ability to scale by adding instances of the runtime engine Threshold: System shall be able to allow up to 1,500 simultaneous user on the system Objective: System shall be able to allow up to 3,000 simultaneous users on the system
7.00	**KPP7: Provide embedded Integrated user/system administrator training support tools.**	
7.10		Tools will facilitate effective individual, staff and command positional training & collective team, staff and unit training. Essential training elements are: - Web-based Training - Web-based transfer - Alert/notification of new training provided with new spiral capability - Focused on the three areas of Individual, Collective, and Conceptual training Threshold: (a) Training support tools must be assessed as favorable by 70% of using C/S/As in a standard Operational Test environment (b) Ease of use and training support effectiveness must be assessed as meeting current JNTC construct. Note: if JNTC construct doesn't

No.	Requirements	Clarifying Criteria Comment
		exist or is not measurable – do not measure I Have embedded help tools, diagnostic proficiency assessment tools, and training management tools (d) Individuals and or units must be able to conduct training on operational systems without affecting real world picture/data. Individual: - 70% of users (C/S/A) judge JC2 training capability as favorable in a standard Operational Test environment - 70% of Systems Administrators judge JC2 training capability as favorable in a standard Operational Test environment Collective: - Units must be capable of simultaneously conducting exercises in Live, Virtual, Constructive environment. Conceptual: - Must incorporate the concept embodied by Training Transformation (JNTC, JKDDC, JAEC). If JNTC construct does not exist or is not measurable, do not measure. Objective: simultaneously conducting exercises in Live, Virtual and Constructive environments
Specific Capabilities		
Collaborative (Synchronous/Asynchronous) Capabilities		
8.00	**Whiteboard**	
8.10	Facilitate effective synchronous collaboration for individuals and organizations to coordinate sourcing analysis and recommendations	Capabilities required: - Draw and erase in real-time on any document, image, screen, slide or picture appearing on screen - Type text in real-time on any document, image, screen, slide or picture appearing on screen - Import and export images, pictures, slides, etc - Save to server or local machine - Support multiple file types: jpg, .png, .gif, bmp, tif, MS office - Take screenshots - Multiple simultaneous whiteboard sessions - Interactivity of multiple users - Different colored pointers for multiple users - Cut, copy, paste function to any Windows-based application
9.00	**Document Sharing**	
9.10	Facilitate effective asynchronous collaboration for individuals and organizations to coordinate sourcing analysis and recommendations	Capabilities required: - Post, check-in and check-out documents - Show a log of user access - Security and access control permissions -- View, edit, delete, create, etc - Upload and download files - Drag and drop files from Windows applications to collaboration site - E-mail document - Edit and track changes by user - Support multiple file types: MS office, .pdf, .txt, image files - Create file structure and set permissions - Copy and move documents between folders

No.	Requirements	Clarifying Criteria Comment
10.00	**Instant Messaging**	
10.10	Facilitate effective synchronous collaboration for individuals and organizations to coordinate sourcing analysis and recommendations	Capabilities required: - Type text in real-time - Visibility of users logged in -- Create 'buddy' lists - Establish private chat rooms - Historical logs of chat sessions - Cut, copy, paste of session logs to Windows applications - Support multiple users simultaneously (i.e. 25) - Upload attachments and image files
11.00	**Really Simple Syndication (RSS Feed)**	
Process Workflow Engine Capabilities		
12.00	**Email and Message Importing and Parsing**	**Leverages the Automated Message Handling System/Defense Messaging System with the ability to import messages and staff any required action through the workflow process**
12.10		Interoperable with current and evolving email client/server applications
12.10a		Microsoft Outlook
12.10b		Microsoft Outlook Express
12.10c		Mozilla Thunderbird
12.10d		
12.20		Ability to retrieve and archive 2000-3000 messages per day
12.25		Sort and parse individual messages, custom format those messages, and metatag those messages by user-specified type (i.e., P4, SHL, RFF, ORDER, etc.)
12.30		Store/archive messages for the duration of a specified operation and for additional length of time specified by other data retention criteria employing a method that supports rapid search and retrieval of archived messages
12.35		Capability to search all messages based upon a user defined query, such as specifying TYPE, ORG, SUBJ, AO, or DTG, and across time periods such as 1 day, 1 week, 30 days, 90 days, or 1 (or more) years
12.36		Capability to conduct fuzzy searches across all data/documents(i.e. wildcard, partial string.)
12.40		Distribute e-mail messages and notifications to specified recipient groups through the organizational email server
12.45		Generate and send email notifications to designated individuals when user-specified priority messages are receipted for, providing a link to the message for immediate retrieval.
12.50		Ability to track, display, and archive for ready search and recall all automated and manually-generated emails
12.55		Support message-based system integration to establish subscriptions that cause message to be sent from one system to another when a business event occurs reporting success or failure of the event.

No.	Requirements	Clarifying Criteria Comment
13.00	**Ability to provide Instant Messaging**	**System needs ability to support IM based on user defined parameters.**
13.00	**Email Action Alerts**	**Automatic email notification, distribution, and tracking as it relates to the force provider workflow process**
13.10		Ability to track, display, and archive for ready search and recall all automated and manually-generated emails
13.20		Ability for user to select means for receiving alert: e-mail, pop-up, ticker tape display…
14.00	**Chronological support**	**Chronological support for calendars, meetings, appointments, reservations of resources (webinars, virtual conference rooms, sidebar rooms)**
14.10		
15.00	**Activity alerts**	**Allow users to establish event-driven alerts**
15.10		Ability to track, display, and archive for ready search and recall all automated and manually-generated emails
15.20		Ability to provide automated suspense notification(reminders, alerts etc) for all documents
16.00	**Data Archiving**	**Retention of data in local stores**
16.10		Ability to track, display, search, and archive for ready search and recall all automated and manually-generated emails
16.20		Ability to track, display, search, and archive for ready search and recall all relevant documents including attachments
17.00	**Workflow Processing**	**Integrated force and capability request GFM Sourcing Package staffing and Requests For Information (RFI) workflow routing with electronic checklists**
17.15		Individual and collaborative GFM staffing package access allowing force providing organizations the capability to create, edit, and disseminate the full range of information required in support of requirements staffing
17.15a		Ability to create a GFM Sourcing Action as a system output
17.15b		Capture a Joint Staff Action Package as a record
17.15c		Capture metadata from staffing records to facilitate search, cataloging, and indexing
15.15d		Display distinctively and allow user reconciliation of captured data
17.20		Track and record all force provider activities to include chops, relevant or associated requests for information, and associated documents or attachments (such as RFFs, Orders, FTN/URFs, Reference documents, etc.), information, and remarks.
17.20a		Display “as of date” for specific data fields (i.e. LAD and Suspense date) to allow immediate clarity on data relevance.
17.25		Separate but integrated workflow functions to address requests for information (RFI), force provider chop response, sourcing recommendations
17.30		Provide audit trail of all transactions across a workflow process
17.30a		Identify creation of a record
17.30b		Identify receipt of a record
17.30c		Identify action taken on a record
17.30d		Provide selectable (on/off) highlight changes capability

No.	Requirements	Clarifying Criteria Comment
17.35		Provide ability to export records, associated processes, and audit trail for various uses as required
17.50		Log and audit workflow activities
17.55		Monitor to anticipate workflow disruptions and send alert notifications with cause identification
17.60		Manage workflow templates and maintain version control
17.65		Activate workflow process through workflow template selection
17.70		XML format support to allow acceptance of templates from any commercially available XML-compliant workflow application
17.75		Establish workflows based upon position (not a specific individual)
17.75a		Provide multiple path workflow for multiple user roles with the process (i.e. JWG membership and Action Officer position)
17.80		Rules-based workflow
17.80a		Provide role/permission/position based vertical and lateral visibility to in-process workflow.
17.80b		Provide user controllable workflow transmission/release capability to prevent vertical and/or lateral visibility of workflow actions unless/until user defined release/approval criteria are met.
17.85		Automated (digital) approval and validation of actions
17.96	Link to associated RFFs	System allows the ability to select/identify any previous/associated RFFs (i.e. Primary RFF, Add RFF)
17.96	Identify Force Tracking Numbers associated with the RFF staffing packet	
17.96a		System needs capability to auto-populate (from an external data source/system) and list all FTNs associated with the GFM Sourcing Action request
17.96b		System needs capability to add additional FTNs associated with the RFF request as a user-input
17.99	Ability to attach required documentation	
17.100	Ability to identify if RFF request is to be included in Daily briefing	Drop Down Y/N selection indicating if requirements are to be included in daily brief.
17.101	Ability to provide a summary of RFF/Package	System must provide operator with the capability of adding text that summarizes the RFF requirements
17.103	Ability to identify appropriate routing for RFF request	System needs ability to select appropriate routing (i.e. Component Routing, Internal Routing, Service and Agency Routing, COCOM routing, Joint Staff, Joint Working Group, Subordinate Command, etc.)
17.105	Ability to identify if there are pending RFIs	
17.105a		System needs capability to identify (YES/NO) if there are RFIs pending for the RFF request

No.	Requirements	Clarifying Criteria Comment
17.105b		System needs to provide capability to create an RFI associated with the RFF request and ability to view responses to applicable previous RFIs.
17.106	Alert capability	
17.106a		Ability to auto-generate notifications to the AO when changes/mods are made to the staffing package
17.106b		Ability for the AO to tailor the type of alerts they receive
17.107	Ability to split/modify staffing packages	Ability to associate one RFF to multiple staffing packages to enable sourcing and status tracking of parts of the RFF (groups of FTNs)
17.108	Ability to route staffing package to the appropriate Joint Force Provider, COCOM, Service, Agency	
17.109	Ability to choose a sourcing form (for example by component command)	
17.111	Standards compliance	Ability to integrate staffing software applications with command specific internal standards-based applications
17.112	Ability to sort/filter RFFs by designated force provider assigned to source the FTN	
17.116	Ability to view a snapshot of the packet prior to sending to recipients.	System will provide the ability to view the packet/form in HTML or text format, including attached files with a generic viewer program
17.117	Print function to attached and network printers, as well as in the form of a saved PDF document	System needs to be able to print the GFM Sourcing Action packet and associated attachments.
17.119	RFI submission	System need capability to generate Requests For Information and view current RFIs that have been previously been entered to include the previous RFI responses provided
17.120	Ability to create and view Chop entries	System need capability to generate and view permissions-controlled Chops required on the package
17.124	Ability to link RFIs to the RFF number and RFF subject line	System needs the ability to auto populate an RFF Number and Subject filed for all RFI generated on a give packet.
17.125	Ability to provide an RFI status	System needs a capability to identify status for the RFI (i.e. Pending, acknowledged, or completed/closed).
17.126	Ability to identify the importance of a given RFI	System needs capability to identify urgency of the RFI (i.e. Critical, Substantive, Administrative; Concur or non-concur pending urgent, routine, critical, high priority, ? etc.)

No.	Requirements	Clarifying Criteria Comment
17.127	Ability to block internal chop comments while staffing is in progress	System needs to provide capability to selectively sequence work flow at various echelons
17.128	Ability to select recommended command to provide requested force	System needs capability to select component / COCOM recommended to provide requested force.
17.130	COCOM-tailored package	
17.131	Ability to provide cross domain sharing between SIPR and NIPR	System needs to be able to share products and chop inputs across SIPR and NIPR domains (i.e. NORTHCOM has significant requirements for NGO/Inter Agency capabilities that do not have access to SIPR).
17.134	Spell-check/grammar-check capability	
18.00	**Support File Attachments**	
18.00a		Email files (.eml)
18.00b		PDF,TIF
18.00c		MS Office files (.doc, .xls, .ppt)
19.00	**Support/integration with common office applications**	
19.00a		Microsoft Word
19.00b		**Microsoft PowerPoint**
19.00c		Microsoft Excel
20.00	**Activity List Control**	**Support creation of user-friendly dashboards enabling individuals involved in any workflow process to view and execute the tasks assigned to them in accordance with user-defined parameters such as priority and due date.**
20.10		Tasks assigned to individuals are listed in the Activity Control List implemented through a sort-and-search mechanism and a customizable column list. Provides ability to access detailed descriptions of any task.
20.20		Task forwarding and specifying alternative resources.
21.00	**Calendar Control**	Provide Organizational Calendar Control
21.10		Organization Calendar Control to interface with organizational calendaring application
22.00	**Dynamic Business Rules Capture/Editing**	**Distinguish policy from action folders/records**
Reporting Capabilities		
23.00	**Rapidly disseminate pre-set and ad-hoc custom reports drawn from real-time data representing one or more points in the workflow process**	

No.	Requirements	Clarifying Criteria Comment
23.10		Present reports in various storable and shareable formats such as Microsoft PowerPoint
23.15		Present automated custom reports representing retrieved and aggregated data for display, daily briefings, auto-email dissemination, record message traffic production and website publication
24.00	**Real-time Workflow Status Reporting**	**Allows leadership to maintain visibility on workflow processes through a web-browser or portal interface**
24.10		Present automated custom reports, in various storable and shareable formats, representing retrieved and aggregated data for display, daily briefings
25.00	**Workflow performance metrics**	**Capture and report in tabular and visual form**
25.10		Present automated custom reports, in various storable and shareable formats, representing retrieved and aggregated data for display, daily briefings
Net-centric Services Oriented Architecture Interoperability Capabilities		
30.00	**Portal GUI**	
30.10	The product shall provide a portal-based interface	
30.15	The product will support web browser interface to facilitate remote access with common web browsers	
30.15a		Internet Explorer
30.15b		Firefox/Mozilla
30.15c		Safari
30.20	The product shall provide the ability to develop multiple schemas for disparate communities of interest.	The product shall be capable of defining different view names, attribute descriptions, relationships, translations, etc for multiple communities of interests. Separate access methodologies should be applied to each.
30.20a		Multiple Views for disparate Communities of Interest can be created and managed using a GUI with editing tool.
30.20b		A developer can simultaneously access different views through a single user account.
31.00	**Metadata Management (includes the management of data source, query and services metadata)**	
31.10	The product shall provide a mechanism that supports “Metadata Configuration Management” to facilitate version	Versioning of metadata objects (schemas, entities, attributes, query dependencies, etc.) to facilitate multiple concurrent releases is critical. The product shall support the discovery of changes to data sources. In the event changes are discovered, the product shall notify the Metadata Administrator.

No.	Requirements	Clarifying Criteria Comment
	control.	
31.10a		Version control mechanism
31.10b		Discovery of changes to data sources flagged to Version control mechanism
31.10c		Metadata Administrator will be notified of changes to each data source.
31.20	The product shall provide a reporting capability to easily (through the use of templates) generate and publish pre-defined and ad-hoc reports against a metadata dictionary.	A flexible run-time reporting capability is required to facilitate impact analysis when changes to views, schemas, mappings, translations, etc. occur due to changes in source data schemas. If no ad hoc reporting capability is provided, what 3rd party reporting tools, e.g., Crystal Reports, does the product support and/or what metadata storage technique, i.e., RDBMS, file based, etc. is used? The product shall also provide a mechanism to capture and report on operational run-time statistics to include but not be limited to Return Record Counts, Query Execution Times, and User Access. The product shall be able to generate reports on a scheduled or requested basis. The product shall support report visualizations (differing tabular formats, charts, graphs).
31.20a		Ad hoc data administration reports can be generated against artifacts, e.g., views, schemas, mappings, translations, etc., contained in the metadata dictionary.
31.20b		Reports generated using templates
31.20c		Reporting on operational run-time statistics, e.g., Return Record Counts, Query Execution Times, User Access.
31.20d		Reports can be generated on a scheduled or ad hoc basis.
31.20e		Reports can be generated in many forms, e.g., graphs, charts, tabular format.
31.20f		Easily interoperate with 3rd party reporting tools. Which ones?
31.30	The product shall provide the capability to capture QUERY metadata.	Examples of query metadata includes, but are not limited to, query origination date, developer or user who created them, where they are used, what data/views they are executed against, query dependencies, hierarchies, etc.
31.30a		Can identify query attributes of interest, e.g., developer who creates a query, create date, associated data, views, query dependencies and communities of interest that use them.
31.30b		Identify views used by each query.
31.30c		Identify attributes as input parameters used by each query and vice versa.
31.30d		Identify each developer that creates a particular query.
31.30e		Identified each COI that use a particular query.
31.30f		Identifies query dependencies.
31.30g		Query execution and performance data.
31.30h		Other objects identified?
31.30i		Controllable query permissions tied to user permissions for limited access data fields with in the system
32.00	**Provide Enterprise Service Management (web service management) to**	

No.	Requirements	Clarifying Criteria Comment
	include: **Fault Management** **Performance Quality (QoS) feedback** **Monitor enterprise configuration/services** **Manage services**	
32.10		
33.00	**Provide machine-to-machine messaging to include:** **Publish/subscribe/receive enterprise messages** **Publish/subscribe/receive alerts by topic** **Publish/subscribe/receive notifications**	
33.10		
34.00	**Provide service discovery**	
34.10		
35.00	**Provide People and Device discovery, to include:** **Person discovery** **Identification and authentication (see Security KPP)** **Policy Decision Service (PDS) - Accepts authorization queries and returns authorization decision assertions, conforming to the Security Assertion Markup Language (SAML) Protocol 1.0 and 1.1**	
35.10		
36.00	**Provide metadata services to include metadata discovery of service information as advertised by producers** **Transparently enhance location, retrieval, and publishing services without interrupting normal business**	

No.	Requirements	Clarifying Criteria Comment
	operations. **Discover services to integrate at design or run-time to create other composite services.**	
36.10		
37.00	**Provide Mediation (XML translation, service orchestration) to include:** **Information transformation** **Service adaptation** **Service orchestration**	
37.10		
System Administration Capabilities		
40.00	**Error Handling**	
40.10	The product shall identify syntax errors prior to execution.	It is desirable that syntax and query construct errors are detected prior to their execution.
40.20	The product shall provide a mechanism to test and debug the query execution.	
40.30	The product shall provide a detailed explanation of all error codes produced.	The product shall provide a robust help facility
41.00	**Administrative Tasks**	
41.10	The product shall support the registration of services in a specified UDDI directory.	
41.15	Monitor and enforce automated service level agreement (SLA) compliance	
41.20	The product shall support fail over and load balancing.	The product shall allow configuration of *multiple instances* on *a single platform or across multiple platforms* in a clustered environment that provides for failover capability and load balancing.
41.20		Product can be configured to support multiple instances simultaneously, executing across *two or more servers* in parallel to support load balancing.
41.20c		Product enables multiple instances to be created on the same server.
41.20d		Product supports a mechanism for failover of itself.
41.20e		Product shall support failover to a backup data source when the primary data source is down.

No.	Requirements	Clarifying Criteria Comment
41.30	The product shall provide a mechanism that enables review of logs indicating which data sources and queries are used by executing a given query.	The product shall log the views/queries accessed per user. The logs shall include but not be limited to user id, tables, accessed, queries executed, and start time, stop time, user-defined items.
41.40	Connection Management	The product shall provide a capability to manage connections between itself and the data sources to maximize throughput of simultaneous users to multiple data sources. *(GCSS has referred to this as connection pools.)*
41.40a		The product shall provide a mechanism to gracefully stop query execution and its subsequent processes.
System Architecture		
50.00	**TECHNICAL ARCHITECTURE / INFRASTRUCTURE**	
50.10	The product shall support access to a wide array of data sources using standards, languages, protocols and drivers, such as ODBC, JDBC, HTTP, SOAP and XML standards, e.g., Xquery, XMI, Xpath, Xquery and, SQL '92 and/or '97.	Evaluation will be based on variety of connections and quality of each. Extensibility of architecture also comes into play.
50.10a		ODBC
50.10b		JDBC
50.10c		XML
50.10d		XMI
50.10e		SQL Net
50.10f		Direct Connect
50.10g		Xquery
50.10		Xpath
50.10i		HTML
50.10j		SOAP
50.10k		Others?
50.20	The product shall be capable of running on multiple OS platforms. Its execution components shall support an application server that runs on Solaris 8, J2EE (JAVA 2 Platform, Enterprise Edition) Platform.	At a minimum, it is expected that the product will offer standard DBMS functionality. Access to product specific capabilities via "native" drivers may be needed for optimizing certain queries. Web Service interfaces may provide additional incremental access to product specific capabilities.

No.	Requirements	Clarifying Criteria Comment
50.30	The product shall provide Web Publishing capabilities and Web-based access to metadata.	Share the project data with people who don't have direct access to the tool.
50.40	The development workbench must support a Windows (NT, 2K, XP) and/or JAVA GUI client.	
50.40a		Development workbench uses Windows
50.40b		Development workbench uses other OS. Specify.
51.00	**Employable in multiple domains: SIPRNet, NIPRNet, Operational, Exercise, and Experimentation**	
51.10		
52.00	**Employable across multiple domains: SIPRNet, NIPRNet (low-to-high), Operational, Exercise, and Experimentation**	
52.10		
53.00	**Reconfigurable (automated with manual intervention)**	
53.10		
54.00	**Thin-client support to deployment areas with less robust IT infrastructure**	
54.10		
55.00	**Implements standards-based, evolving, open IT technologies in support of Department of Defense (DoD)/other government agency (OGA) multinational (MN)/interagency (IA)/non-governmental organization (NGO) communities of interest (COI) (identify all proprietary aspects)**	
55.10		
56.00	**Client (consumer) application**	

No.	Requirements	Clarifying Criteria Comment
	interoperability	
56.10		
57.00	**Serve as an interim web service solution evolving both client (consumer) and data provider systems to global information grid enterprise services (GIG-ES)**	
57.10		
58.00	**Support for SPARCv9 and Red Hat Linux ES/AS 3 architecture**	
58.10		
59.00	**Support the Simple Network management Protocol (SNMP) for use with common management systems, including CA/Unicenter, HP OpenView, IBM/Tivoli TMS, and Sun Solstice software**	
59.10		
60.00	**Full compliance for JavaServer pages (JSP) 1.2 and Java Servlet 2.3 specifications**	
60.10		
61.00	**Support the configuration of Quality of Service (QoS) parameters for a published message including the priority, precedence, and time-to-live (TTL).** **a. Monitor and measure Web service health and performance.** **b. Report and visualize key Web service performance metrics.** **c. Monitor and enforce service level agreement**	

No.	Requirements	Clarifying Criteria Comment
	(SLA) compliance. **d. Manage Web service lifecycle.** **e. Log and audit Web service activities.** **f. Anticipate Web service problems and send alert notifications.** **g. Pinpoint the root cause of Web service problems**	
61.10		
System Security Capabilities		
70.00	**Policy Retrieval Service (PRS) - Exposes security policies in Extensible Access Control Markup Language (XACML) format and can be used for service providers to retrieve policies for their resources.**	
70.10		
71.00	**Policy Administration Service (PoAS) - Used by management applications to add, update and delete authorization policies stored as Policy Sets.**	
71.10		
72.00	**Certificate Validation Service (CVS) - Revocation status checking is performed by allowing clients to delegate the certificate validation tasks.**	
72.10		
73.00	**Principal Attribute Service (PrAS) - Provides query and retrieval interfaces to access attributes for users.**	
73.10		
74.00	**Support for SSLv2,**	

No.	Requirements	Clarifying Criteria Comment
	SSLv3, TLS 1.0, and X.509 digital certificates	
74.10		
75.00	**Publishing / advertising of service definitions, descriptions, metadata, and accessibility. Information producers may include:** **a. Web services (i.e. service-enabled target tracking applications),** **b. Data repositories (e.g. coalition-shared database),** **c. Devices (e.g. sensor platforms),** **d. Business functions (e.g. a helpdesk for technical support).**	
75.10		

Appendix B

Force Provider Global Sourcing Collaborative Staffing Capability Data Element Requirements

Data element requirements are populated from external data sources through standards-based data services provided by identified data providers. The target architecture for this force provider global sourcing collaborative staffing capability allows for dynamic data integration, archiving consumed data primarily for historical query purposes only.

Data Element	Data Description	Field Size	Field Type	Emergent	Rotational	Exercise	Contingent	IA
Sequential Request Number (RFF #)	Number of deployment order or RFF – must support multiple RFFs in a single GFM staffing action – supports all COCOM RFF numbering conventions (i.e. PACOM: P-XXX, SOUTHCOM: SC-XXX, etc.) – supports entry of modification numbers	20	AN	X	X	X	X	X
COCOM	Identifies the requesting supported combatant command (JOPES defined field)	1	AN	X	X	X	X	X
Supported JTF or Supported Component	Identifies the requesting supported JTF organization of supported Service component	20	AN	X	X	X	X	X
Operation	Supported operation name (MFO, OIF, OEF, etc.) – system must enable user to add new operation/event – once the operation/event has been added, the system will auto-populate all operation/event drop-downs – system must enable user to delete an operation/event – once the operation/event has been deleted, the system will remove the deleted operation/event from all operation/event drop-downs	80	AN	X	X	X	X	X
Mission	Free text description of the operational mission	512	AN	X	X	X	X	X
Security Classification	Overall security classification for the GFM sourcing action – system needs a drop-down capability to enter appropriate security classification for the RFF IAW current	12	A	X	X	X	X	X

Data Element	Data Description	Field Size	Field Type	Emergent	Rotational	Exercise	Contingent	IA
	classification guidance							
GFM Sourcing Action Status	System needs the ability to display standardized status fields to enable standard report generation	12	AN	X				
GFM Sourcing Action Suspense/Due Dates	Suspense/due dates for multiple action levels – ability to auto-populate due dates based on due date identified in the GFM Sourcing Action – system capability for user to enter/override due date based on user defined date (i.e., drop-down calendar capability)	8	AN	X	X	X	X	X
DTG	Date-Time-Group – user needs ability to enter a DTG in the proper MTF format (DDhhmmzMMMYYYY) based on the original request or as a dropdown menu based on current system date							
Required Capability	Free-form description of the identified force requirement. May be updated from TUCHA for standard UTC. May be input by planner. (Description of the capability being requested in generic terms, skill sets, tech capacities desired, proficiencies needed, etc.)	512	AN	X	X	X	X	X
Risk	System needs capability of identifying level of risk associated with recommendation, providing attachment slides associated with each risk, and auto populating the Tank briefing slides (Risk areas: Operational, Future Challenges, Force Management, Institutional Risk)	11	A	X	X		X	X
Risk Justification	Free Text narrative addressing impact to the mission if not sourced	512	AN	X	X		X	X
FTN	Field used to uniquely identify, organize, and manage force/capability requirements requested by a combatant commander or supported organization – system must be able to submit multiple FTNs	11	AN	X	X	X	X	
Previous FTN	Presently used to support rotational requirements, identifies a requirement's previously sourced FTN	11	AN		X			

Data Element	Data Description	Field Size	Field Type	Emergent	Rotational	Exercise	Contingent	IA
Next FTN	Presently used to support rotational requirements, identifies a requirement's follow-on FTN to be sourced	11	AN		X			
UTC	Identifies the generic type of unit required for the specific force requirement – may be a standard UTC contained in the TUCHA, or a nonstandard UTC input by a user – a ULN cannot be initialized without a UTC	5	AN	X	X	X	X	X
Unit Type	Type unit being requested IAW the TUCHAREP	25	AN	X	X	X	X	
SRC	Standard requirements code (Army) – applies to Army Table of Organization and Equipment (TOE) units and Modified Table of Organization and Equipment (MTOE) units – identifies a basic TOE or elements and variations thereof – SRCs have a UTC relationship in the Army TUCHA, and a UIC relationship in GSORTS – the SRC may relate to the UTC prior to sourcing; however, SRC should relate to the UIC when there is a GSORTS related value	13	AN	X	X			
BOS	Battlefield Operating system (BOS)	25	AN		X			
BOS Matrix Notes	Free text field describing BOS and guidance for sourcing working groups	256	AN		X			
Nomenclature	Long-name of required capability	54	AN	X	X	X	X	X
Nomenclature Description	Free text description of nomenclature capability – a description of the capability being requested including quantities, modifications or combinations	512	AN	X	X	X	X	X
Specialized Requirements	Free text field to identify security clearance requirements, equipment modifications, and any other necessary clarifications or amplifications of requirements	512	AN	X	X	X	X	X
Quantity	Quantity of the like capabilities required – the number of like capabilities needed to fulfill the request	4	N	X	X	X	X	X
Earliest LAD	System needs ability to auto-populate or manually enter the Earliest LAD in	4	N	X				

Data Element	Data Description	Field Size	Field Type	Emergent	Rotational	Exercise	Contingent	IA
	the proper JOPES format, associated with all FTNs contained in the RFF or based on requirement as added by the user as a user-defined date							
Associated FTNs	The Force Tracking Numbers uniquely identify, organize, and manage force/capability requirements requested by a combatant commander or supported organization – system must be able to submit multiple FTNs – the FTNs associated with the required amount	11	AN	X	X	X	X	X
Requirements PAX Estimate	Personnel strength in the objective area for the specific force requirement – personnel strength includes all passengers (PAX) or other personnel transported to the objective area by all modes of transportation – only personnel who are committed to the plan or operation are included in PERS	5	N	X	X	X	X	X
Deployment Location	Free text narrative description of the employment location (US facility, base, and country)	512	AN	X	X	X	X	X
CRD	Supported commander's critical delivery date (a JOPES field) – indicates a day relative to C-day that defines a Supported Commander's specified delivery date for a force to be ready for employment. Shown in the time-phased force and deployment data to assess the impact of late arrival – latest arrival date (LAD) in which the requirement is needed in theater by the Combatant Commander in order to commence employment operations – if a PTDO is specified, this is the date the unit begins PTDO status, and for Naval units, this is the INCHOP date to the AOR	3	N	X	X			
JRSOI	Expected time (in days) needed to support Joint Reception, Staging, Onward Movement & Integration (JSROI) requirements – date in which the requirement will rotate back, not to exceed SECDEF guidelines for activation and/or time in theater – this is the time required for overlap from	8	N	X	X			

Data Element	Data Description	Field Size	Field Type	Emergent	Rotational	Exercise	Contingent	IA
	one rotation to another							
End Date	Also referred to as BOG or OUTCHOP, the projected redeployment date	8	N	X	X			
PTDO	Prepare to Deploy Order (PTDO) requirement indicator (yes or no)	1	A	X	X			
PTDO Response Time	Number of hours or days asset should be prepared to deploy – response time of unit on "Prepare to Deploy Orders" from notification to "wheels up"	2	N	X	X			
ILO	In Lieu of (ILO) acceptability indicator (yes or no) – indicates if In Lieu Of sourcing is acceptable – answers, “could an ILO force perform this mission?”	1	A	X	X			
Service Only	Indicates if a specific Service is required (yes or no) – answers, “Is the mission such that only a specific service can perform the mission?”	1	A	X	X			
Joint	Indicates if it is a Multi Service requirement (yes or no) – answers, “Is a multi-service or other service sourcing acceptable?”	1	A	X	X			
Contractible	Indicates if it is Contract-supportable requirement (yes or no) – answers, “Could this requirement be satisfied through the use of contractors? If so but not contracted, must explain in notes why this is not being contracted	1	A	X	X			
Assigned Force	Indicates if requirement can be filled with supported commander’s assigned forces (yes or no)	1	A	X	X			
Internal Rotations	Indicates if requirement can be supported by internal rotation of capability (yes or no) – is this request being internally supported by the same unit for the duration of the requirement? This drives the LAD, since a providing unit rotates personnel on a TBD schedule	1	A	X	X			
Action Officer (AO) Name	Ability to auto-populate Action Officers (AOs) based on contact information identified in the GFM Sourcing Action – system must provide ability for user to enter additional AO information to allow forwarding of e-mail to the	30	AN	X	X	X	X	X

Data Element	Data Description	Field Size	Field Type	Emergent	Rotational	Exercise	Contingent	IA
	designated AO POCs when information is added, chopped, etc. to the RFF request							
AO Phone	Duty hours phone number of the AO	20	AN	X	X	X	X	X
AO SIPRnet E-mail	SIPRnet email address of the AO	80	AN	X	X	X	X	X
AO NIPRnet E-mail	NIPRnet email address of the AO	80	AN	X	X	X	X	X
POC Name	Name of the person to be contacted by the transportation provider to coordinate unit movement details	30	AN	X	X	X	X	X
POC Phone	Duty hours phone number of the POC	20	AN	X	X	X	X	X
POC SIPRnet E-mail	SIPRnet email address of the POC	80	AN	X	X	X	X	X
POC NIPRnet E-mail	NIPRnet email address of the POC	80	AN	X	X	X	X	X
Special Operations GWOT Priority	SOCOM Priority Flag	10	AN	X	X			
Force Provider	Identified Force Providing organization (JOPES field)	1	AN	X	X	X	X	X
Sourcing Guidance	Free text field identifying guidance to force providing organizations relative to risk, suspense for solution, redlines, etc.	512	AN	X	X			
Joint Prioritization	Prioritization in accordance with Joint Integrated Requirements Priority List (JIRPL)	4	AN		X			